

A NEW SPECIES OF *HEDEOMA* (LAMIACEAE) FROM NORTHEASTERN MEXICO

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ABSTRACT

Hedeoma oblatifolia Villarreal sp. nov., from the mountains of southeastern Coahuila (Northeast Mexico), is described and illustrated. It is similar to *H. johnstonii* Irving, and is easily recognized by its relatively larger flower, circular-oblate leaves and retrorse hairs on the stem.

RESUMEN

Hedeoma oblatifolia Villarreal sp. nov. de las montañas del sureste de Coahuila (Noreste de México), es descrita e ilustrada. Es similar a *H. johnstonii* Irving, y se reconoce fácilmente por sus flores relativamente grandes, hojas circular-oblatas y pelos retrorsos en el tallo.

KEY WORDS: Lamiaceae, *Hedeoma*, Coahuila, Flora of México.

Hedeoma, which is primarily a Mexican/North American genus, was revised by Irving (1980). Subsequently, Henrickson (1986) and Turner (1991) have contributed to the taxonomy of the genus and a brief account of the genus can be found in the recent review of Mexican Lamiaceae by Ramamoorthy and Elliott (1993). The flora of Northeast México is only beginning to be appreciated; it consists of many narrow endemic, especially in the alpine areas of the territory (McDonald 1993). Among novelties that are being discovered in the course of routine study of the flora of this part of Mexico is *Hedeoma oblatifolia* from southeastern Coahuila.

***Hedeoma oblatifolia* Villarreal sp. nov. (Fig. 1)**

Herbae perennes, caules usque ad 30 cm alti trichomatibus retrorsum crispatis bilineatisque. Folia patentia glabra oblata vel orbiculati-oblata, marginibus denticulatis. Cymulae 1–3 flores ferentes. Calyx tubularis 8–10 mm longus. Corolla tubularis ca. 35 mm longa violacea. Nuculae ca. 2 mm longae.

Wiry perennial herb up to 30 cm tall; shoots ascending, numerous, unbranched, rooting at the lower nodes, 4-angled with retrorsely curly hairs in two lines along the stem, changing in position alternately at each internode. Leaves spreading, lightly coriaceous in texture, glabrous, glandular punctate sparsely in the lower surface, oblate-circular 6–14 mm long, 8–15 mm wide with 4–8 pairs of diminutive teeth along the margin; petiole short 1–2 mm long, midrib and secondaries elevated on the lower surface. Flowers in cymules of 1–3 peduncles

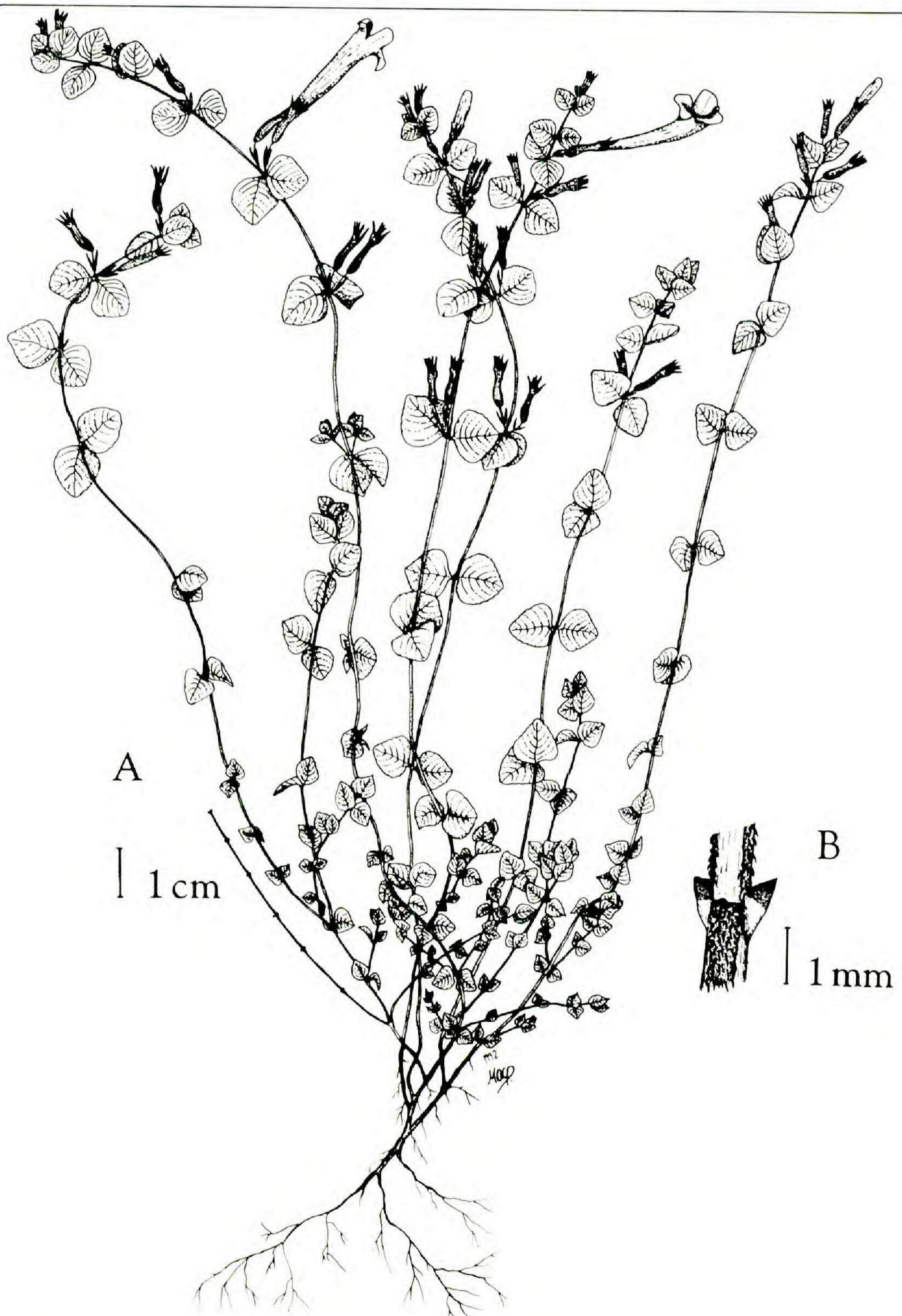


FIG. 1. *Hedeoma oblatifolia*. A. Habit, B. Internode showing retrorse hairs, 12 \times .

4 mm long, pedicels 5–6 mm long, both with short retrorse curly hairs; bracteoles lanceolate, glabrous, equal or slightly longer than the pedicels. Calyx tubular, slightly gibbous, 8–10 mm long, sparsely hirsute; upper teeth partially united

forming a slightly reflexed lip, lobes triangular 2 mm long, hirsute-ciliate; lower teeth 3–4 mm long, elongated at the tip, hirsute-ciliate, annulus at the end of the tube. Corolla tubular or slightly widened to the mouth, up to 35 mm long, showy, violet, the upper lip short 4–5 mm long, the lower lip 7–8 mm long, trilobate. Fertile stamens 2, ascending under the upper lip, anthers divaricate, staminods reduced to short filaments. Style glabrous, unequally forked at the apex. Nutlets oblong, 2 mm long, black.

TYPE: MEXICO. Coahuila. Mpio. Saltillo, Sierra Catana, 40 km SW de Saltillo, 101° 12' W, 25° 15' N, paredes rocosas en bosque de *Quercus hypoxantha* y *Pseudotsuga menziesii* con *Cercocarpus macrophyllus*, 2900–3100 m. 29 Jul 1992, J.A. Villarreal Q. 6466, M.A. Carranza y H. Nieto (HOLOTYPE: MEXU; ISOTYPES: ANSM, ENCB, TEX.).

Distribution: Presently known only from the type locality.

The population of *Hedeoma oblatifolia* was found on rocky slopes at higher elevations (2900 to 3100 m) in a mesic forest of oaks and Douglas Fir. Among the interesting species found in these areas are *Chrysactinia truncata*, *Brachypodium mexicanum* and *Galium uncinulatum*. Its restricted distribution along with the many other endemic species of *Hedeoma*, regards northeastern México as a center of diversity for the genus.

The new species, which is recognized by its circular-oblate leaves, retrorse curly hairs disposed in two lines along stem and long showy corolla, at first appears to be a large-flowered element of *H. costatum* Gray var. *pulchellum* with which it is sympatric. Absence of plants which are intermediate between the two species suggest a higher degree of genetic differentiation between these two. *H. oblatifolia* is also similar to *H. johnstonii* which differs in lacking retrorse hairs occurring along the stem. The two are allopatric with the latter restricted to the mountains of northern Coahuila.

The three species of *Hedeoma* previously mentioned belong to the subgenus *Saturejoides* Irving, section *Saturejoides* Irving, and can be separated by the following key:

1. Corolla 9–12(–20) mm long; the stem covered with hairs on all sides *H. costatum*
1. Corolla more than 30 mm long; the stem glabrous or not covered with hairs on all sides 2
 2. Leaves ovate-oblong; hairs on stem restricted to the nodes *H. johnstonii*
 2. Leaves oblate-circular; hairs on stem retrorse, occurring in two lines *H. oblatifolia*

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